

MALACOLOGY.—*Nomenclatural review of genera and subgenera of Chamidae.*DAVID NICOL,¹ U. S. National Museum.

Except for the excellent paper by Odhner (1919), which has not been carefully studied by most other workers, little research in systematics has been done on the Chamidae. Genera and species of this interesting pelecypod family have, in general, not been understood. Before giving a description of the family, it is necessary to point out the principal weakness of a nomenclatural review. There is always the possibility that one or more genera will be incorrectly allocated because the descriptions and figures are unrecognizable. The problem of inadequate descriptions and figures can be solved only by examining specimens of the type species.

The Chamidae have a porcellaneous shell which may have either concentric or radial ribs, and the shell may be spinose, nodulose, or smooth. The inner ventral border may be smooth or may have small crenulations. A sulcus is commonly present at the posterior fifth of the shell. It runs from the umbos to the posterior ventral border. The shell may be attached by either valve (more commonly the left one) to the substrate during a small part of or practically all of its life. The valves may be markedly unequal or only slightly so, but the attached valve is always the larger. There is no gape for the byssus, foot, or siphons. With the exception of *Echinochama*, which has a lunule, neither a lunule nor an escutcheon is present. The beaks are prosogyrate and are placed in front of the parivincular ligament. This structure is external but commonly sunken. The pallial line is integripalliate, with a small indentation where it joins the posterior adductor muscle scar. In some species the pallial line joins the anterior adductor muscle scar not at the ventral margin but along the anterior margin. The anterior adductor muscle scar commonly abuts the anterior margin of the hinge plate. The adductor muscle scars are large and either elongate or ovate. The pallial line and adductor muscles commonly resemble those of the lucinids. The hinge teeth in adult shells have been greatly modified by the torsion of the beaks

and secondary splitting, and there is little agreement as to the number of cardinal and lateral teeth in each valve. However, the basic pattern appears to be like that of a highly modified lucinoid hinge. One large cardinal tooth is present in each valve. In the attached valve, particularly in *Echinochama*, a much smaller cardinal tooth is located above and posterior to the large cardinal tooth. A small conical posterior lateral tooth is sometimes seen on the attached valve.

The following genera and subgenera are chamids, with type species whose morphological characters correspond to those of the family, and whose names are nomenclaturally valid. This does not mean that all will be acceptable when careful work on the classification of the Chamidae is completed, but these names form a basis for future taxonomic work on the family.

Chama Linné, 1758, pp. 691,692. Type species (subsequent designation, Schumacher, 1817, pp. 20,123. See also Stewart, 1930, p. 33) *Chama gryphoides* Linné, 1758, Recent; Mediterranean Sea. Figd., Bucquoy, Dautzenberg, & Dollfus, 1892, pl. 50, figs. 1-4.

Ciplyella Vincent, 1930, pp. 111,112. Type species (original designation)—*Chama pulchra* Ravn, 1902, Danian, Paleocene; Denmark, Belgium. Figd., Vincent, 1930, pl. 6, fig. 12. *Ciplyella* is probably a chamid, although a careful study of the type species is necessary to ascertain this.

Echinochama Fischer, 1887, p. 1049. Type species (monotypy)—*Chama arcinella* Linné, 1767, Recent; West Indies. Figd., Reeve, 1847, vol. 4, *Chama* species 26, pl. 5, fig. 26a.

Eopseuma Odhner, 1919, pp. 25,75. Type species (monotypy)—*Pseudochama (Eopseuma) pusilla* Odhner, 1919, Recent; Strait of Macassar. Figd., Odhner, 1919, figs. 20-27.

Maceris Modeer, 1793, pp. 174,182. Type species (subsequent designation, Winckworth, 1935, p. 322)—*Chama lazarus* Linné, 1758, Recent; East Indies. Two species were referred to in the discussion of the genus *Maceris* (p. 182)—*Chama gryphus* Linné and *Chama lazarus* Linné. It is not certain whether Modeer meant *Chama gryphoides* Linné or *Anomia gryphus* Linné for the first species. Figd., Reeve, 1847, vol. 4, *Chama* species 4, pl. 2, figs. 4a, b.

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Pseudochama Odhner, 1917, pp. 28-34. Type species (subsequent designation, Prashad, 1932, p. 295)—*Chama cristella* Lamarck, 1819, p. 96, Recent; East Indies. *Chama cristella* has been considered the type species of *Pseudochama* by original designation and by monotypy. Neither of these ideas is correct. Odhner mentioned other species as belonging to *Pseudochama* in his original discussion of the genus. Figd., Reeve, 1847, vol. 4, *Chama* species 42, pl. 8, fig. 42.

The following generic and subgeneric names have been associated with the Chamidae in the past, but all of them appear to be unavailable from the evidence thus far obtained.

Arcinella Schumacher, 1817, pp. 47, 142. Type species (monotypy)—*Arcinella spinosa* Schumacher, 1817 = *Chama arcinella* Linné, 1767. A homonym of *Arcinella* Oken, 1815, which is a carditid genus.

Camelaea Herrmannsen, 1852, vol. 2 (supplement), p. 23. A genus without species. Herrmannsen refers to a work by P. F. Gmelin which has been rejected by the International Commission of Zoological Nomenclature, Opinion 123.

Camela Rafinesque, 1815, p. 148. An emendation of the name *Chama* Linné, 1758.

Camostrea Deshayes, 1830, p. 178. A genus without species. Also a misinterpretation of Blainville's definition of the genus.

Chamigenus Renier, 1807, p. vii. Original reference not seen. Renier's names ending in *genus* have not been accepted by malacologists. For a good review of the problem, see Keen, 1951, pp. 8-15.

Chamites Gmelin, 1793, p. 402. The name *Chamites* is listed as a species under the genus *Helmintholithus*. Neave (1939, p. 668) and Schulze (1927, p. 630) are in error in considering *Chamites* of Gmelin as a generic name.

Cipleyella Neave, 1939, vol. 1, p. 740. Error for *Ciplyella* Vincent, 1930.

Diceratia Oken, 1815, p. 829. Type species (monotypy)—*Chama cor* Linné, 1767. *Diceratia* appears to be a synonym of *Isocardia* Lamarck, 1799, and *Glossus* Poli, 1795.

Diceratis Paetel, 1875, p. 69. Error for *Diceratia* Oken, 1815.

Globus Deshayes, 1832, p. 170. A genus without species and a homonym of *Globus* Scopoli, 1772.

Goossensia Cossmann, 1885, p. 113. Type species (monotypy)—*Goossensia plicatuloides* Cossmann, 1885, pp. 113-115. Probably not a

chamid; however, Dall's opinion (1903, p. 1397) that the genus is based on a nepionic shell of a chamid is certainly worthy of investigation.

Gryphus Gray, 1847, p. 193. A genus without species. This name is listed under *Chama* and *Arcinella* and credited to Humphrey, as a manuscript name. A homonym of *Gryphus* Megerle, 1811, *Gryphus* Oken, 1816, among others.

Hellia Schafhäütl, 1863, pp. 160, 161. Type species (monotypy)—*Hellia gryphus* Schafhäütl, 1863. This species has been described from poorly preserved internal casts, but it probably does not belong to the family Chamidae. The right valve is supposedly larger than the left.

Jalaronus Bruguière, 1792, p. 546. A genus without species. It is impossible, from the brief description, to define the genus.

Lacinea Sowerby, 1842, p. 168. A genus without species. Listed as a synonym of *Chama* Lamarck.

Lazarus Cuvier, 1800, table 5. A nomen nudum.

Licinia Gray, 1847, p. 193. A genus without species. This name is listed under *Chama* and *Arcinella* by Gray and credited to Humphrey, 1797, as *Licinia* sp. A homonym of *Licinia* Swainson, 1820.

Macerophylla Mörch, 1853, p. 36. A genus without species. Listed as a manuscript name of Martens.

Macerophyllum Herrmannsen, 1847, vol. 2, p. 1. A genus without species.

Macrophyllum Gray, 1847, p. 193. A genus without species. Also a homonym of *Macrophyllum* Gray, 1838.

Psiloderma Fischer, 1887, p. 1048. Error for *Psilopoderma* Poli, 1795.

Psilopoderma Poli, 1795, pp. 253, 258. Type species (monotypy)—*Chama gryphoides* Linné, 1758. A synonym of *Psilopus* Poli, 1795, and of *Chama* Linné, 1758.

Psilopoderma Agassiz, 1846, p. 313. Emendation of *Psilopoderma* Poli, 1795.

Psilopus Poli, 1795, p. 112. Type species (monotypy)—*Chama gryphoides* Linné, 1758. A synonym of *Chama* Linné, 1758.

Psilotus Rafinesque, p. 146. An error for *Psilopus* Poli, 1795.

Stola Herrmannsen, 1849, vol. 2, p. 503. A genus without species.

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ENTOMOLOGY.—A new carpenterworm from Florida (Lepidoptera: Cossidae).

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It is seldom that so large and conspicuous a moth as that described below remains undiscovered for so long a time, especially since it inhabits a well-populated area and a region frequented by entomologists. Nevertheless such is the case, and it is a further example of what yet remains to be done in many parts of the country. The larvae of this species were first reported by William Reimer, a medical student, and the type series was reared and submitted by Prof. H. F. Strohecker, Department of Zoology, University of Miami.

Prionoxystus baccharidis, n. sp.

Figs. 1-4b

Alar expanse: Male, 34-49 mm. Female, 43-45 mm.

Antenna black with strong, metallic-blue iridescence above. Labial palpus, head, thorax, and ground color of forewing sordid white to cinereous, the lighter color prevailing in the female; palpus, head, and thorax with dark-gray and black scales mixed; forewing covered with a fine, black reticulum somewhat heavier in male than in female; costal black markings